

REMARKS

I. Introduction

The Office Action of August 11, 2009 has been reviewed and the Examiner's comments carefully considered. Claims 22, 24, 26, 28, 32-34, 36, 40, and 42 are currently pending in this application and claims 22 and 36 are in independent form. Based on the following discussion, the Applicant respectfully requests favorable reconsideration of the claims.

II. 35 U.S.C. §103 Rejections

Claims 22, 24, 26, 28, 32-34, 36, 40, and 42 stand rejected under 35 U.S.C. §103(a) for obviousness based upon United States Patent No. 5,190,632 to Fujimiya et al. (hereinafter "the Fujimiya patent") in view of United States Patent No. 5,998,796 to Liu et al. (hereinafter "the Liu patent"). In view of the following remarks, the Applicant respectfully requests reconsideration of this rejection.

As defined by independent claim 22, the present invention is directed to a device for selecting and recording an image of an irradiated or emissive object comprising complexes of DNA, RNA, or proteins. The device includes an immovable object holder for positioning the object in a stationary position, at least one mirror for reflecting an image of the object, a camera, first drive means for displacing the camera substantially parallel to a rotation axis of the at least one mirror, and second drive means for rotating the at least one mirror about the rotation axis which is perpendicular to an optical axis of the camera, thereby displacing the at least one mirror for selecting a part of the image from the reflected image of the object while holding the object in the stationary position. The camera is displaceable in a viewing area in which the image of the object is reflected by the at least one mirror that lies on the optical axis of the camera.

As defined by amended independent claim 36, the present invention is also directed to a method for selecting an image to be recorded with a camera which forms a part of an irradiated or emissive object comprising complexes of DNA, RNA, or proteins. The method includes the steps of: A) placing the object in stationary position on an immovable object holder, B) reflecting an image of the object with at least one rotatable mirror that lies on an optical axis of a camera and rotates about a rotation axis which is perpendicular to the optical axis of the

camera, and C) selecting with the camera and by displacing the at least one mirror a part of the image of the object to be viewed from the reflected image while holding the object in the stationary position. The camera is displaced substantially parallel to the rotation axis of the at least one mirror in a viewing area in which the image of the object is reflected by the at least one mirror.

The Fujimiya patent is directed to a multi-colored electrophoresis pattern reading system including an electrophoresis unit (1) and a reading unit (6) disposed separately from the electrophoresis unit (1). The electrophoresis unit (1) includes an electrophoresis unit section (5) having a gel member that serves as a base for electrophoresis and a gel support member for supporting the gel member by a glass panel. The electrophoresis unit section (5) is removed from the electrophoresis unit (1) after electrophoresis has been finished and mounted to the reading unit (6) for reading the resulting pattern of electrophoresis. The reading unit (6) includes an instrumentation body (7). The operation of the reading unit (6) is as follows: laser beams (31) emitted from the light source (21) are scanned with a vibrating mirror (22) and the gel member is exposed to the laser beams (31). The gel member of the electrophoresis unit section (5) emits fluorescence upon irradiation with the spot lights of the scanned laser beams (31). The resulting fluorescence (13) is then received by the light collector (23). The light received by the light collector (23) is converted into electric signals by an optoelectric conversion section (24) and then amplified by an amplifier (25) (*see* FIGS. 1 and 2).

A. The Fujimiya patent and the Liu patent fail to teach or suggest each and every element of the claimed invention

The Fujimiya patent does not teach or suggest at least one mirror displaceable for selecting a part of the image from the reflected image of the object while holding the object in the stationary position as required by independent claims 22 and 36. The Examiner contends that vibrating mirror (22) of the Fujimiya patent corresponds to the at least one displaceable mirror of the present invention. However, the vibrating mirror (22) of the Fujimiya patent is not provided to select a part of the image from the reflected image of the object as required by the independent claims. Instead, this mirror is provided to scan the gel member of the electrophoresis unit section (5) with laser light (31) produced by light source (21). There is no teaching or suggestion in the Fujimiya patent that vibrating mirror (22) selects a part of an image from a reflected image. In

fact, the vibrating mirror (22) of the Fujimiya patent cannot perform such a function because only laser light (31) is reflected off of this mirror instead of a reflected image. Accordingly, a fundamental difference between the present invention and the Fujimiya patent is that the system of the Fujimiya patent utilizes a vibrating mirror to reflect an excitation source whereas the present invention has a light source that is stationary.

The Examiner further points to column 12, lines 34-68 and column 13, lines 1-15 of the Fujimiya patent as disclosing this feature of the present invention. However, this portion of the Fujimiya patent merely describes the manner in which the vibrating mirror (22) is moved to scan the gel member of the electrophoresis unit section (5) with laser light produced by the light source (21). There is no teaching or suggestion in this section of the Fujimiya patent that vibrating mirror (22) is provided for selecting a part of the image from the reflected image of the object while holding the object in the stationary position as required by independent claims 22 and 36.

In addition, the Liu patent does not cure this deficiency. The Liu patent is directed to a detector for DNA sample identification and is provided by the Examiner as allegedly teaching a drive means for displacing a camera. The Liu patent does not teach or suggest at least one mirror displaceable for selecting a part of the image from the reflected image of the object while holding the object in the stationary position as required by independent claims 22 and 36.

To establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. Where claimed limitations are simply not present in the prior art, a *prima facie* obviousness rejection is not supported. Since the combination of the Fujimiya patent and the Liu patent fails to teach or suggest at least one mirror displaceable for selecting a part of the image from the reflected image of the object while holding the object in the stationary position as required by independent claims 22 and 36, a *prima facie* case of obviousness has not been established.

B. Secondary Considerations – Evidence of Commercial Success

Further still, the present invention enjoys significant commercial success as evidenced by the Henegouwen Declaration. The Henegouwen Declaration details the commercial success enjoyed by the invention as it relates to the pending claims. More

particularly, over 350 imaging systems based on the invention have been sold in the past 10 years with minimal advertising expenses. Customers have indicated that an important selling feature for these sales was the ability of the system to select a part of the image of an irradiated or emissive object (*see* paragraph 3 of the Henegouwen Declaration). This feature is clearly set forth in the language of claim 22 (*see* “second drive means for rotating the at least one mirror about the rotation axis which is perpendicular to an optical axis of the camera, thereby displacing the at least one mirror for selecting a part of the image from the reflected image of the object while holding the object in the stationary position”) and claim 36 (*see* “selecting with the camera and by displacing the at least one mirror a part of the image of the object to be viewed from the reflected image while holding the object in the stationary position”). Evidence as to market share is also provided in paragraph 3 of the Henegouwen Declaration.

In addition, the Henegouwen Declaration describes in paragraph 4 that the imaging systems embodied by the present invention have been well accepted by users because replacement orders are frequently received by existing customers. Furthermore, Hoefer, USA has entered into an OEM agreement for the system of the present invention based on its ability to select a part of the image of an irradiated or emissive object (*see* paragraph 5 of the Henegouwen Declaration).

Based on the foregoing, not only has commercial success been established, but a nexus between the claimed subject matter and the evidence of commercial success has been shown. The Court of Appeals for the Federal Circuit stated in *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538, 218 USPQ 871, 879 (Fed. Cir. 1983) that “evidence rising out of the so-called ‘secondary considerations’ [such as commercial success] must always when present be considered en route to a determination of obviousness” (*See also KSR v. Teleflex*, 550 U.S. 398). Thus, Applicant submits that the aforementioned evidence of commercial success requires removal of the Examiner’s obviousness rejections.

For the foregoing reasons, the Applicant believes that the subject matter of independent claims 22 and 36 is not rendered obvious by the combination of the Fujimiya patent and the Liu patent. Reconsideration of the rejection of claims 22 and 36 is respectfully requested.

Claims 24, 26, 28, 32-34, 40, and 42 depend from and add further limitations to independent claim 22, independent claim 36, or a subsequent dependent claim and are believed to be patentable for at least the reasons discussed hereinabove in connection with independent claims 22 and 36. Reconsideration of the rejection of claims 24, 26, 28, 32-34, 40, and 42 is respectfully requested.

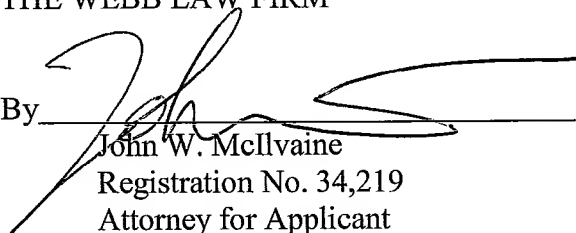
III. Conclusion

Based on the foregoing remarks and the Henegouwen Declaration, reconsideration of the rejections and allowance of pending claims 22, 24, 26, 28, 32-34, 36, 40, and 42 are respectfully requested. Should the Examiner have any questions or wish to discuss the application in further detail, the Examiner is invited to contact Applicant's undersigned representative by telephone at 412-471-8815.

Respectfully submitted,

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